



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,568	10/13/2005	Noelle Philippe	H0004973	1600
46507 7590 06/16/2008 HONEYWELL TURBO TECHNOLOGIES 23326 HAWTHORNE BOULEVARD, SUITE #200 TORRANCE, CA 90505				
EXAMINER				
TRIEU, THAI BA				
ART UNIT		PAPER NUMBER		
3748				
MAIL DATE		DELIVERY MODE		
06/16/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/553,568

**Applicant(s)**

PHILIPPE, NOELLE

**Examiner**

Thai-Ba Trieu

**Art Unit**

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 and 8-19 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 14 April 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

This Office Action is in response to the Amendment filed on April 11, 2008. Applicant's cooperation in correcting the informalities in the drawing and specification is appreciated. Applicant's cooperation in amending the claims to overcome the claim objections relating to informalities as well as multiple dependency is also appreciated.

Claims 1-6 and 8-19 were amended and claim 7 was cancelled.

### ***Drawings***

Applicant(s) is/are required to shade the Drawings with the shading scheme, which represents: Punched metal material, polymer potted material, die casting material, and sand casting material (See MPEP § 608.02).

### ***Specification***

The substitute Specification, submitted on April 11, 2008, is accepted.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement thereof, since the recitation of ***“one of the bottom portions forming part of a fixed encapsulation barrier between the stator and the compressor wheel”*** introduce new matter not supported by the original disclosure.

The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. See *In re Daniels*, 144 F.3d 1452, 46 USPQ2d 1788 (Fed. Cir. 1998); *In re Rasmussen* 650 F.2d 1212, 211 USPQ 323 (CCPA 1981).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and its dependent claims 2-6 and 8-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

- In claim 1, the recitation of ***“one of the bottom portions forming part of a fixed encapsulation barrier between the stator and the compressor wheel”*** renders the claim indefinite, since it is not clear that how can one of the bottom portions form part of a fixed encapsulation barrier? How is the encapsulation barrier to be fixed? Applicant is required to clarify the part of the bottom portion to be formed as a fixed encapsulation barrier between the stator and the compressor wheel.

Claim 10 recites the limitation "the material properties" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-6, 11-12, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Frister (Patent Number 4,253,031).***

**Regarding claims 1-6 and 11-12,** Frister discloses an electric motor cartridge (10) comprising:

a first cartridge housing portion (12, 13);

a second cartridge housing portion (12, 13); and

a rotor (9);

the cartridge housing portions (12, 13) being coupled together so as to assemble the electric motor cartridge (10) by radially and axially encapsulating a stator (11) therebetween,

wherein at least one of the cylindrical wall portions (not Numbered) forms a contact upon insertion of the assembled electric motor cartridge (10) in the housing (12, 13);

wherein one of the bottom portions ( Not Numbered) forms part of a fixed encapsulation barrier between the stator (11) and a compressor wheel to be driven by the assembled electric motor cartridge (10);

characterized in that

each cartridge housing portion (12, 13) has a semi-shell shape substantially comprised by a bottom portion (Not Numbered) and a cylindrical wall portion (Not numbered), wherein each cartridge housing portion (12, 13) provides a bore (Not Numbered) in the center of its bottom portion (Not numbered) for supporting respective portions of a rotor (9);

wherein at least one of the cartridge housing portions (12, 13) is provided with at least one recess portion (Not Numbered) formed at the inner side of the axial end portion of the cylindrical wall portion (Not Numbered) which extends at least partially in the circumferential direction of the cylindrical wall for receiving a projection (Not Numbered) of the stator (11);

wherein each cartridge housing portion (12, 13) is provided with one recess portion (Not Numbered), wherein the recess portions (Not Numbered) are symmetrically to a plane defined by the abutting tips of the cylindrical wall end portions;

wherein at least one of the bottom portions (Not Numbered) is formed at least partly concave inwardly;

wherein at least one contact area (Not Numbered) is formed at each of the cartridge housing portions (12, 13) so as to be in contact with respective counter contact areas of two housings (Not Numbered) between which the cartridge is fittable;

wherein in at least one of the cartridge housing portions (12, 13) a circumferentially extending groove (Not Numbered) is disposed so as to receive an o-ring for sealing between the cartridge housing (12, 13) and one of the two housings (Not Numbered) between which the cartridge (12, 13) is fittable (See Figure 1, Column 3, lines 1-68, Column 4, lines 1-31);

wherein at least one of the cartridge housings (12, 13) comprising a connector portion (21b, 21b') for phases and sensor connections of a compressor motor (See Figure 4-5); and

wherein the rotor (9) is encompassed by  
the stator (11) (See Figure 1).

**Regarding claims 17-19, Frister further discloses**

a turbine housing (Not Numbered) for accommodating a turbine wheel (2) driven  
by exhaust gas;

a center housing (12, 13) for accommodating a shaft (6) and the electric  
motor (10), the shaft serving as a rotor (9) of the electric motor (10) and extending from  
the turbine wheel (2) through a journal bearing (4,5) and the electric motor (10) to a  
compressor wheel (3);

a compressor housing (Not Numbered) for accommodating the compressor  
wheel (3);

wherein

the compressor wheel (3) is driven by the turbine wheel (2) via the  
shaft (6) and can additionally be driven by the electric motor (10), and

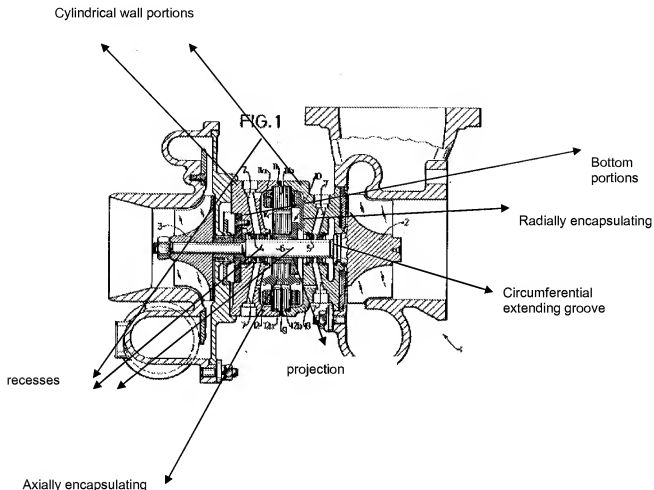
the electric motor (10) is accommodated in the center housing (12, 13)  
such that the electric motor (10) is firmly fixed by connecting the center housing  
(12, 13) to the compressor housing (Not Numbered) (See Figure 1);



wherein one of the cartridge housing portions (12, 13) serves as a seal plate on the journal bearing (4,5) side and the other cartridge housing portion (12, 13) serves as a backplate on the compressor wheel (3) side;

a motor housing (12, 13) for accommodating a shaft (6) and the electric motor (10), the shaft (6) serving as a rotor (9) of the electric motor (10) and carrying a compressor wheel (3); and a compressor housing (not Numbered) for accommodating the compressor wheel (3); wherein the electric motor (10) is accommodated in the motor housing (12, 13) such that the compressor motor (10) is firmly fixed by connecting the motor housing (12, 13) to the compressor housing (Not Numbered) (See Figure 1)..

Note that the recitations of "one of the cartridge housing portions serving as a seal plate on the journal bearing side", "the other cartridge housing portion serving as a backplate on the compressor wheel side", and "for phases and sensor connections" are an intended use recitation. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).



### ***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claim 8 is rejected under 35 under 35 U.S.C. 103(a) as obvious over Frister (Patent Number 4,253,031), in view of either Osborn (Patent Number 4,521,155), or Ikeno (Patent Number JP 07-147750 A).***

Frister discloses the invention as recited above; however, Frister fails to disclose the cartridge housing being made of punched metal, any polymer potted material, any die casting material, or any sand casting material.

Osborn/Ikeno teaches that it is conventional in the turbocharger compressor housing art, to utilize the housing of the compressor being made of punched metal, any polymer potted material, any die casting material, or any sand casting material (See Column 2, lines 6-15, Column 3, lines 1-8, and Column 7, lines 1-39, See Abstract).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the cartridge housing being made of punched metal, any polymer potted material, any die casting material, or any sand casting material, as taught by Osborn/Ikeno, to improve the efficiency and the performance of the Frister device.

Note that as the compressor housing unit, consisting two components, is cast by die casting or sand casting, the materials have to be elected for being suitable in die casting or sand casting.

***Claims 8-9 are rejected under 35 under 35 U.S.C. 103(a) as obvious over Frister (Patent Number 4,253,031), in view of Horne (Patent Number 4,342,929).***

Frister discloses the invention as recited above; however, Frister fails to disclose the cartridge housing being made of punched metal, any polymer potted material, any die casting material, or any sand casting material; and the properties of material of the cartridge housing contributing to heat evacuation and heat protection.

Horne teaches that it is conventional in the electric motor housing art, to utilize the housing of the compressor being made of punched metal, any polymer potted material, any die casting material, or any sand casting material; and the properties of material of the cartridge housing contributing to heat evacuation and heat protection (See Abstract, Column 1, lines 15-53).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the cartridge housing being made of punched metal, any polymer potted material, any die casting material, or any sand casting material; the properties of material of the cartridge housing contributing to heat evacuation and heat protection, as taught by Horne, to improve the efficiency and the performance of the Frister device.

Note that a polymeric material has its own properties of heat resistance, therefore, such kind of material is able to withstand the motor working temperature.

***Claim 10 is rejected under 35 U.S.C. 103(a) as obvious over Frister (Patent Number 4,253,031), in view of Wang (Patent Number 5,789,841).***

Frister discloses the invention as recited above; however, Frister fails to disclose the housing being made of the material having the material properties of being contributed to electromagnetic interference protection.

Wang teaches that it is conventional in the art of electromagnetic radiation shielding materials and structures for electromagnetic interference attenuation for electronic equipment, to utilize the housing (electronic equipment housing) being made of the material having the material properties of being contributed to electromagnetic interference protection (See Column 4, lines 5-8).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the housing being made of the material having the material properties of being contributed to electromagnetic interference protection, as taught by Wang, to improve the efficiency of the Frister device, since the use thereof would have prevented the radiation of electromagnetic interference.

***Claim 15 is rejected under 35 U.S.C. 103(a) as obvious over Frister (Patent Number 4,253,031), in view of either Akiyama (Patent Number 5,306,997) or Kawamura (Patent Number 4,850,193).***

Frister discloses the invention as recited above; however, Frister fails a sensor member for detecting the speed of the rotor.

Akiyama/Kawamura teaches that it is conventional in the turbocharger art, having rotary electric machine, to utilize a sensor member (33 of Akiyama; 7b of Kawamura) for

detecting the speed of the rotor (See Figures 1-2, Column 3, line 35-37 of Akiyama; and Figure 1, Column 3, lines 13-16 of Kawamura)

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a sensor member for detecting the speed of the rotor, as taught by to improve Akiyama/Kawamura, to improve the efficiency and performance of the Frister device, since the use thereof would have controlled the speed of the rotor.

#### ***Allowable Subject Matter***

Claims 13-14 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed on April 11, 2008 have been fully considered but they are not persuasive. Accordingly, claims 1-6 and 8-19 are pending.

1. On Page 9, of the Detailed Action mailed on October 11, 2007; there appears the Examiner's typo error. The phrase of "***Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Frister (Patent Number 4,253,031)***" should be corrected as following:

-- **Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Frister (Patent Number 4,253,031).** --

2. In response to applicant's arguments, applicant states that claim 6 is not listed as being rejected and that the reasons for rejection of claim 6 are not provided in the Detailed Action.

The Examiner respectfully disagrees, since the claim 6 is listed as being rejected in Part 6 of the Office Action Summary mailed on October 11, 2007; and the reasons for rejection of claim 6 are provided in the last paragraph on page 10 of the Detailed Action mailed on October 11, 2007.

3. In response to the Applicant's arguments, applicant states that, Frister does not disclose or suggest an assembled cartridge formed by two portions that radially and axially encapsulate a stator there between.

The examiner respectfully disagrees, since Frister does disclose a stator is radially and axially encapsulated there between an assembled cartridge formed by two portions, which is shown in attached Figure 1.

4. Applicant's arguments, with respect to the rejection of claims 1-5 under 35 U.S.C. 102(b) as being anticipated by the admitted Prior Art Allen et al. (Patent Number 6,449,950 B1 or WO 02/23047 A1) have been fully considered and are persuasive. The rejection of claims 1-5 has been withdrawn.

5. Applicant's arguments, with respect to the rejection of claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Oda et al. (Patent Number 5,121,605 or DP 0 338 147 A1) have been fully considered and are persuasive. The rejection of claims 1-3 has been withdrawn.

***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a



Art Unit: 3748

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB  
June 6, 2008

/Thai-Ba Trieu/  
Primary Examiner  
Art Unit 3748